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Rce/28/2

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# REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL

Address to:  
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P.O. Box 1450  
Alexandria, VA 22313-1450

Application Number	09/763,641
Filing Date	03/29/2001
First Named Inventor	Katherine GILES
Art Unit	2812
Examiner Name	Alexander G. Ghyka
Attorney Docket Number	WLJ.072

## This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application

Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

### 1. Submission required under 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such

- a. ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.
- i. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_
- ii. ☐ Other \_\_\_\_\_
- b. ☒ Enclosed
- i. ☒ Amendment/Reply
- ii. ☐ Affidavit(s)/Declaration(s)
- iii. ☐ Information Disclosure Statement (IDS)
- iv. ☐ Other \_\_\_\_\_

### 2. Miscellaneous

- a. ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of \_\_\_\_\_ months (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)
- b. ☐ Other \_\_\_\_\_

### 3. Fees

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

- a. ☒ The Director is hereby authorized to charge the following fees, or credit any overpayment to Deposit Account No. 50-0238
- i. ☒ RCE fee required under 37 CFR 1.17(e)
- ii. ☒ Extension of time fee (37 CFR 1.136 and 1.17)
- iii. ☒ Other ADDITIONAL CLAIMS FEE (\$144)
- b. ☒ Check in the amount of \$ 1,824.00 enclosed
- c. ☐ Payment by credit card (Form PTO-2038 enclosed)

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## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Name (Print / Type)	ADAM C. VOLENTINE	Registration No. (Attorney / Agent)	33289
Signature		Date	AUGUST 28, 2003

## CERTIFICATE OF MAILING OR TRANSMISSION

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This collection of information is required by 37 CFR 1.8. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**ATTY DOCKET #:** WLJ.072

**DUE DATE:** May 28, 2003

**APPLICANT:** Katherine GILES et al.

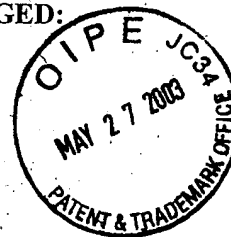
**SERIAL NO.:** 09/763,641

**FILING DATE:** February 26, 2001

**TITLE:** METHOD AND APPARATUS FOR FORMING A FILM ON A SUBSTRATE

**RECEIPT OF THE FOLLOWING PAPERS IS ACKNOWLEDGED:**

- Request for Reconsideration



**DATE:** May 27, 2003

**ATTY:** ACV

**[Check No. N/A]**



Serial No. 09/763,641  
WLJ.072

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent application of :  
Katherine GILES et al. : Group Art Unit 2812  
Serial No. 09/763,641 : Examiner G. Ghyka  
Filed March 29, 2001 :  
METHOD AND APPARATUS FOR FORMING A FILM ON A SUBSTRATE

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**REQUEST FOR RECONSIDERATION**

Honorable Commissioner For Patents  
Washington, D.C. 20231

**COPY**

Sir:

A Notice of Appeal was filed in the above-identified application on March 28, 2003. However, Applicants did not previously file a Request For Reconsideration responsive to the final Office Action date June 18, 2002. Accordingly, prior to the submission of a formal Appellant's Brief, Applicants respectfully request that the Examiner reconsider the rejections contained in the final Office Action.

Claims 1-23 and 25-35 stand rejected as being unpatentable over Tsukune et al. (EP 0519079). In the final Office Action, the Examiner states:

*"Applicants argue that the prior art reference Tsukune et al is directed to a process in which undesirable organic groups are removed, and that Tsukune et al disclose the removal of any organic groups. Applicants further argue that Tsukune*

*et al does not teach the setting of the deposited film such that carbon containing groups are contained therein. The Examiner maintains that Tsukune et al is replete with references pertaining to the organic groups that remain in the film. See for example page 9, lines 30-35, page 7, lines 15-20 and page 5, lines 35-40. (Emphasis added.)*

As discussed below, Applicants respectfully disagree with the Examiner's apparent suggestion that Tsukune et al. teach that organic groups remain in the film after setting of the film.

The Examiner initially refers to page 9, lines 30-35, of Tsukune et al., which state *inter alia* that the "amount of the organic groups contained in the above-described thin film of silicon oxide having flatness is preferably as small as possible so far as the planarization is possible... ." However, the film referred to here by Tsukune et al. is the as-deposited film. The Examiner's attention is directed to the immediately preceding paragraph of Tsukune et al. which reads as follows:

*"Thus, the silicon oxide film deposited on the substrate according the present invention has at least an organic group and a suitable molecular weight, which enables the thin film to be flattened. Although the content and molecular weight of the organic group cannot be simply described, it is necessary for at least the surface of the formed film to have a flatness to such an extent that the surface does not form a surface of discontinuity even in a portion having a step."*

Thus, Tsukune et al. teach the inclusion of the minimum amount of organic groups needed to achieve planarization of the as-deposited film. No setting of the film has yet to occur. Indeed, once planarization of the film is realized, Tsukune et al. teaches that the organic groups are undesirable and are to be removed prior to setting of the film. See FIG. 5B of Tsukune et al., and the following passages appearing at page 6 of thereof:

*"... in the present invention, a filmy gel comprising a low-molecular weight polymer containing organic groups is deposited on the substrate. The filmy gel has fluidity, and the film can be leveled... . Thereafter, an undesirable organic group is removed from the leveled film."*

*"... after the organic-group-containing silicon oxide film is deposited, the formed film may be heat-treated to remove the organic groups, thereby causing the organic-group-containing silicon oxide film to be converted to a silicon oxide film."*

The Examiner's references to page 7, lines 15-20, and page 5, lines 35-40, of Tsukune et al. are not understood. The passages at page 7 simply support Applicants assertions that organic groups are to be removed in Tsukune et al. prior to or during curing of the film. The passages at page 5 deal with issues relating to conventional organic SOG materials.

Tsukune et al. is directed to a process in which organic groups are initially included in the film to achieved planarization of the as-deposited film. However, once planarization is achieved, the organic groups become unnecessary, and in

fact, "undesirable". Thus, Tsukune et al. teach that an H<sub>2</sub>O plasma treatment and/or heat treatment are carried out to remove the organic groups prior to setting of the film.

Tsukune et al. does not teach setting of the deposited film such that carbon-containing groups are contained therein. Rather, the carbon groups of Tsukune et al. are removed to form a silicon oxide film.

For *at least* the reasons stated above, Applicants respectfully contend that Claims 1-23 and 25-35, are not obvious in view of the teachings of the cited Tsukune et al. reference.

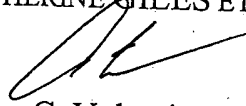
***Conclusion***

No other issues remaining, reconsideration and favorable action upon the Claims 1-23 and 25-35 now-pending in the application are requested.

Respectfully submitted,

KATHERINE GILES ET AL.

By:

  
Adam C. Volentine  
Reg. No. 33,289

May 27, 2003

VOLENTINE FRANCO, PLLC  
12200 Sunrise Valley Drive, Suite 150  
Reston, VA 20191  
(703) 715-0870